Assessing outcomes after adrenalectomy for unilateral primary aldosteronism

Dear Editor,

We read with interest the article "Clinical outcomes after surgery for primary aldosteronism: evaluation of the PASO-investigators´consensus criteria within a worldwide cohort of patients" by Vorselaars and collaegues.[1] From their retrospective study the authors concluded that 16% of their patients were incorrectly or debatably classified using the criteria of the PASO consensus.[2] The authors suggested that this was mainly due to using a cut-off of ≥20 mmHg to classify a clinically relevant change in systolic blood pressure. In addition, the authors suggested that use of percentages instead of absolute values in change of antihypertensive medication (daily defined doses) contributed to this incorrect classification.

We would like to clarify a number of points:

1. The use of office blood pressure measurements are notorious for their variability. This variability may even be exaggerated in the study because blood pressure (as main outcome parameter) was not measured in a standardized way. This is clearly illustrated by the fact that in 27% of the patients the preoperative blood pressure level was based on only one blood pressure value and this was increased to 50% of patients for assessment of postoperative blood pressure. The reliability and accuracy of the changes in blood pressure in this study are therefore questionable.

2. Related to the previous point, a cut-off change in systolic blood pressure of 10 mmHg, as recommended by the authors, cannot be considered sufficiently robust to estimate partial clinical success. The cut-off level of 20 mmHg was selected from the differences between blood pressure levels that define blood pressure categories of hypertension[3] and used by the PASO group of experts to define criteria for clinical outcomes with the structured Delphi method. The authors argue that 10 mmHg is more appropriate than 20 mmHg, based on the associated decrease in cardiovascular morbidity and mortality from studies in patients with primary hypertension. However, data from primary hypertensives cannot be translated to patients with primary aldosteronism in whom a complete biochemical response to treatment is essential[4] (which was not assessed by Vorselaars et al.[1]) and who have an increased cardiovascular risk compared with patients with primary hypertension.[5]

3. The PASO consensus used an absolute value of ≥ 0.5 DDD to define a relevant change in medication and not a 50% change. Thus, the authors have incorrectly applied the PASO criteria to evaluate outcomes. According to table 4, 15 of their 26 patients had a decrease in DDD of >0.5 DDD, so these 15 patients should be classified as partial and not as absent clinical success.

4. Finally, the heterogeneous approach for the identification of surgically-treatable patients (with reliance on nonfunctional imaging in 36% of patients) and the considerable deviation from the PASO recommendations for the timeframe of follow up in 68% of patients underlines further the inappropriateness of comparing data from Vorselaars et al.[1] with the PASO study.[2]

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